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PATENT

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JAN 18 2001

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1616 \$

In re the application of:

Fischetti et al.

Serial No. 09/844,435

Group: 1616

Filed: April 30, 2001

Examiner: Raj Bawa

The Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

PROPRIETARY INFORMATION DISCLOSURE STATEMENT

Sir:

The attached is a proprietary list of patents and patent applications filed by the inventors or the owners of the present invention. Most of the patent applications will not issue before the issue date of the above listed serial number. It is therefore requested that those patent applications on the attached list not issued prior to the issuance of the above listed patent be redacted.

Applicant provides the following summaries of the enclosed prior art, along with a Form PTO-1449, all of which are enclosed.

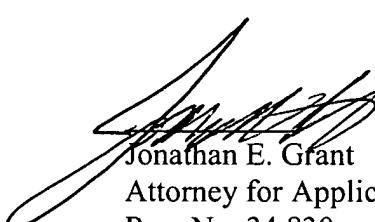
The statement is submitted under the provisions of 37 CFR 1.56 and 1.97(b)(1).

Respectfully submitted,

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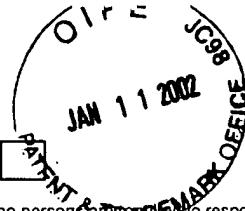
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 5

Complete if Known

Application Number	
Filing Date	
First Named Inventor	
Group Art Unit	1618
Examiner Name	BAWA, R.
Attorney Docket Number	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		6,264,945		Fischetti et al.	07-24-2001	
		6,254,866		Fischetti et al	07-03-2001	
		6,248,324		Fischetti et al.	06-19-2001	
		6,238,661		Fischetti et al.	05-29-2001	
		6,056,955		Fischetti et al.	05-02-2000	
		6,056,954		Fischetti et al.	05-02-2000	
		6,017,528		Fischetti et al.	01-25-2000	
		5,997,862		Fischetti et al.	12-07-1999	
		5,985,271		Fischetti et al.	11-06-1999	
		5,688,501		Merril et al.	11-18-1997	
		4,957,686		Norris	09-18-1990	
		5,604,109		Fischetti et al.	02-18-1997	
		5,882,631		Suga et al.	03-16-1999	
		5,741,487		Asai et al.	04-21-1998	
		6,113,887		Mori et al.	09-05-2000	
		4,122,158		Schmitt	10-24-1978	
		3,983,209		Schmitt	09-28-1976	
		6,113,887		Mori et al.	09-05-2000	
		4,885,163		Shaar et al.	12-05-1989	

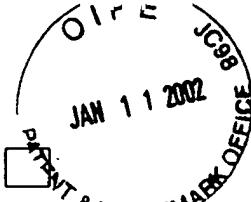
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)			
		WO 97 02351 A		CIBA GEIGY AG, et al.	01-23-1997		
		WO 96 07329 A		UNIV. MARYLAND	03-14-1996		
		EP 0 510 907 A		AGRICULTURAL & FOOD RES	10-28-1992		
		WO 99 04809 A		AMBI INC	02-04-1999		

Examiner Signature		Date Considered
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 5

Complete if Known

Application Number

Filing Date

First Named Inventor

Group Art Unit

Examiner Name

1619

BAWA

(08-00)
51-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	
				Filing Date	
				First Named Inventor	
				Group Art Unit	1619
				Examiner Name	BAWA
Sheet	2	of	5	Attorney Docket Number	

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

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Sheet **3** of **5**

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Application Number	
Filing Date	
First Named Inventor	
Group Art Unit	1619
Examiner Name	BAWA
Attorney Docket Number	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Reisenger, et al. (1998) "Characterization of Escherichia coli lysis using a family of chimeric E-L Genes" <i>Fems Microbiol Letter</i> . 164(1) p.159-167	
		Sheehan MM, et al. (1997) "The lytic enzyme of the Pneumococcal Phage Dp-1: a chimeric lysis of intergeneric origin." <i>Mol. Microbiol</i> . 25(4) p. 717-725	
		Young et al. (2000) "Phages will out: stragegies of host cell lysis." <i>Trends in Microbiology</i> . 8(4) p. 120-127	
		Garcia et al.(1997) "The Pneumococcal cell wall degrading enzymes: A modular design to create new lysins?" <i>Microb. Drug Resist.</i> 3(2): p. 199-211	
		Sheehan MM, et al., (1997) "The Lytic Enzyme of the Pneumococcal Phage Dp-1: a Chimeric Lysin of Intergeneric Origin" <i>Mol. Microbiol</i> . 25(4) p. 717-25	
		Garcia P, et al. (1997) "Bacteriophages of Streptococcus pneumoniae: a molecular approach" <i>Microb. Drug Resist.</i> 3(20) 165-76.	
		Sheehan, MM, et al.(1996) "Analysis of the catalytic domain of the lysin of the lactococcal bacteriophage Tuc2009 by chimeric gene assembling." <i>FEMS Microbiol.Lett.</i> 14(1): p. 23-28.	
		Sanz, JM, et al. (1996) "Construction of a multifunctional pneumococcal murein hydrolase by module assembly." <i>Eur. J. Biochem</i> . 235(3):601-5	
		Lopez R, et al. (1995) "Architecture and Domain Interchange of the Pneumococcal Cell Wall Lytic Enzymes" <i>Dev. Biol. Stand.</i> 85 p. 273-81.	

Examiner Signature	Date Considered
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Sheet

4 of 5

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Application Number	
Filing Date	
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Group Art Unit	1619
Examiner Name	BAWA
Attorney Docket Number	

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

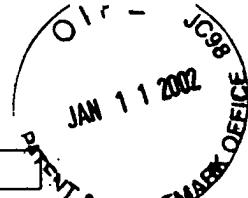
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Croux, et al.(1993) "Interchange of Functional Domains Switches Enzymes Specificity: Construction of a chimeric pneumococcal-clostridial cell wall lytic enzyme." <i>Mol. Microbiology</i> . 9(5) p. 1019-25.	
		Diaz, E. et al. (1990) "Chimeric phage-bacterial enzymes: a clue to the modular evolution of genes. <i>PNAS</i> . 87(20) p. 8125-9.	
		Diaz, E. et al.(1990) "Chimeric pneumococcal cell wall lytic enzymes reveal important physiological and evolutionary traits." <i>J. Biol. Chem.</i> 266(9) p. 5464-71.	
		Lopez, et al. (1997) "The pneumococcal cell wall degrading enzymes: A modular design to create new lysins?" <i>Microbiological Drug Resistance</i> . 3(2) p. 199-211.	
		Loessner, et al. (1999) "Evidence for a holin-like protein gene fully embedded out of frame in the endolysin gene of <i>Staphylococcus aureus</i> Bacteriophage." (1999) <i>Journal of Bacteriology</i> , 181(15) p. 4452-4460.	
		Witte, A et al. (1998) "Characterization of <i>Escherichia coli</i> lysis using a family of chimeric E-L genes." <i>FEMS Microbiol. Lett.</i> , 164(1), p. 159-167	
		Martin, Ana C et al (1998): "Functional analysis of the two-gene lysis system of the pneumococcal phage Cp-1 in homologous and heterologous host cells." <i>Journal of Microbiology</i> 180(2), p. 210-217	
		Oki Masaya et al. (1997) "Functional and structural features of the holin HOL protein of the <i>Lactobacillus plantarum</i> phage phi-gle: Analysis in <i>Escherichia coli</i> system." <i>Gene (AMSTERDAM)</i> 197(1-2) p 137-145.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT			
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Sheet	5	of	5
		Application Number	
		Filing Date	
		First Named Inventor	
		Group Art Unit	1619
		Examiner Name	BAWA
		Attorney Docket Number	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Signature		Date Considered	
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LIST OF NEW HORIZON PATENTS AND PATENT APPLICATIONS

Patent/Application No.	Country	Filing Date	Issue Date	Inventors	Title
Pat. No. 5,604,109 App No.09/962,523	U.S.A.	09-13-94	02-18-97	Fischetti	A Method for Exposing Group A Streptococci Antigens and an Improved Diagnostic Test for the Identification of Group Streptococcus.
Pat. No. 5,997,862 App No.09/962,523	U.S.A.	10-31-97	12-7-99	Fischetti Loomis	Therapeutic treatment of Group A Streptococcal Infections
Pat. No. 6,017,528 App No. 09/257,025 (Cert. of Correction)	U.S.A.	02-25-99	01-25-00	Fischetti Loomis	Therapeutic Treatment of Group A Streptococcal Infections
Pat. No. 5,985,271 No.09/257,026 (Cert. of Correction)	U.S.A.	02-25-99	11-16-99	Fischetti Loomis	Prophylactic and Therapeutic Treatment of App of Group A Streptococcal Infections
Pat. No. 6,506,954 App.No. 09/395,636 (Cert. of Correction)	U.S.A.	09-14-99	05-02-00	Fischetti Loomis	Use of Bacterial Phage Associated Lysing Enzymes for the Prophylactic and Therapeutic Treatment of Various Illnesses
Pat. No. 6,238,661 App. No. 09/497,495	U.S.A.	04-18-00	05-29-01	Fischetti Loomis	Use of Bacterial Phage Associated Lysing Enzymes for Treating Various Illnesses
Pat. No. 6,264,945 App. No.09/482,992	U.S.A.	01-14-00	07-24-01	Fischetti Loomis	Parenteral Use of Bacterial Phage Associated Lysing Enzymes for the Therapeutic

Treatment of Bacterial Infections

Pat. No. 6,056,955 App. No. 09/395,637	U.S.A.	09-14-99	05-02-00	Fischetti Loomis	Topical Treatment of Streptococcal Infections
App. No. 09/654,484	U.S.A.	09-01-00	Trudil	The Use of Phage Associated Lytic Enzymes For the Rapid Detection of Bacterial	
App. No. 09/654,483	U.S.A.	09-01-00	Fischetti Loomis	A Composition for Treatment of A Bacterial Infection of An Upper Respiratory Tract	
Pat. No. 6,254,866 App. No. 09/653,690	U.S.A.	09-01-00	07-03-01	Fischetti Loomis	Use of Phage Associated Lytic Enzymes For Treating Bacterial Infections of the Digestive Tract
App. No. 09/654,482	U.S.A.	09-01-00	Fischetti Loomis	A Composition for Treatment of a Bacterial Infection of the Digestive Tract	
Pat. No. 6,277,399 App. No. 09/671,882	U.S.A.	09-28-00	08-21-01	Fischetti Loomis	Compositions Incorporating Bacterial Phage Associated Lysing Enzymes For Treating Dermatological Infections
App. No. 09/671,881	U.S.A.	09-28-00	Fischetti Loomis	A Composition for Treatment of Vaginal Bacterial Infections	
App. No. 09/671,880	U.S.A.	09-28-00	Fischetti Loomis	A Composition for Treatment of An Ocular Bacterial Infection	
Pat. No. 6,248,324	U.S.A.	09-28-00	06-19-01	Fischetti	Bacterial Phage Associated Lysing

App. No. 09/671,879			Loomis	Enzymes for Treating Dermatological Infections
App. No. 09/671,878	U.S.A.	09-28-00	Fischetti Loomis	The Use of Bacterial Phage Associated Lytic Enzymes for Treating Dermatological Infections
App. No. 09/671,991	U.S.A.	09-28-00	Fischetti Loomis	A Composition for Treating Dental Caries Caused by Streptococcus Mutans
Pat. No. 6,335,012 App. No. 09/671,992	U.S.A.	09-28-00	Fischetti Loomis	A Method for Treating Dental Caries Caused by Streptococcus Mutans
NOTE: THE USPTO PRINTED THE WRONG TITLE AND THE WRONG CLAIMS				
Pat. No. 6,326,002 App. No. 09/671,990	U.S.A.	09-28-00	12-04-01	Fischetti Loomis
				The Use of Bacterial Phage Associated Lytic Enzymes for Treating Bacterial Infections of the Upper Respiratory System
App. No. 09/704,148	U.S.A.	11-02-00	Fischetti Loomis Trudil	The Use of Bacterial Phage Associated Lytic Enzymes to Prevent Food Poisoning
App. No. 09/560,650	U.S.A.	04-28-00	Fischetti Loomis	The Use of Bacterial Phage Associated Lysing Enzymes for the Prophylactic and Therapeutic Treatment of Various Illnesses
App. No. 09/752,731	U.S.A.	01-03-01	Fischetti Loomis	The Parental Use of Bacterial Phage Associated Lysing Enzymes For The Lysing Enzymes for the Therapeutic

			Treatment of Bacterial Infections
App. No. 09/932,460	U.S.A.	07-13-01	Fischetti Loomis The Use of Bacterial Phage Associated Lysing Enzymes for Treating Various Illnesses
Prov. No. 60/324,089	U.S.A.	09-24-01	Fischetti Loomis The Use of Bacterial Shuffled and Chimeric Phage Associated Lytic Enzymes for the Prophylactic and Therapeutic Treatment of Colonization and Infections caused By <i>Streptococcus Pneumoniae</i>
App. No. 09/960,472	U.S.A.	09-24-01	Fischetti Loomis The Use of Bacterial Phage Associated Lysing Enzymes for the Prophylactic and Therapeutic Treatment of Colonization and Infections Caused by <i>Streptococcus pneumoniae</i>
App. No. 09/908,737	U.S.A.	07-19-01	Fischetti Loomis Parenteral Use of Bacterial Phage Associated Lysing Enzymes for the Therapeutic Treatment of Bacterial Infections
App. No. 09/910,940	U.S.A.	07-13-01	Fischetti Loomis The Use of Bacterial Phage Associated Lytic Enzymes to Prevent Food Poisoning
App. No. 09/844,435	U.S.A.	04-30-01	Fischetti Loomis The Use of Bacterial Phage Associated Lysing Enzymes For

Treating Various Illnesses

App. No. 09/846,688 U.S.A.

05-02-01

The Use of Bacterial Phage
Associated Lysing Proteins for the
Prophylactic and Therapeutic
Treatment of Various Illnesses

PCT US99/04063

N/A

99909595.3

2000-600679

2001126302

not yet filed

P19917152-0

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2001-700898

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02-25-99

PCT

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A Means for the Prophylactic and
Therapeutic Treatment of
Streptococcal Infections

Fischetti
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